

WE CLAIM:

1. A portable camera including:

- 5 (a) digital image capture device for the capturing of digital images;
 (b) an inbuilt printer device;
 (c) a programming language interpreter internally connected to said digital image capture device for the manipulation of a digital image captured by said capture device;
 (d) a script input means for inputting a self documenting program script for the manipulation and filtering of
 10 said captured digital image to produce visual alterations thereof, said script input means including a card reader for optically reading a script printed as an array of dots on one surface of a portable card;
 (e) a display;

wherein said script is interpreted and executed by said interpreter means to modify a captured digital image in accordance with said script to produce a digital image modified from said captured digital image, wherein said
 15 display is adapted to display said modified image, and wherein said printer device is adapted to print said modified image.

2. A portable camera as claimed in claim 1 wherein said card has, on said one surface, a fault tolerant encoded form of the said script.

3. A portable camera claimed in claim 2 wherein said programming language includes a language construct
 20 for implementing image warping.

4. A portable camera claimed in claim 2 wherein said programming language includes a language construct for implementing convolution.

5. A portable camera claimed in claim 2 wherein said programming language includes a language construct for implementing color lookup tables.

25 6. A portable camera claimed in claim 2 wherein said programming language includes a language construct for implementing posterising images.

7. A portable camera claimed in claim 2 wherein said programming language includes a language construct for adding noises to images.

30 8. A portable camera claimed in claim 2 wherein said programming language includes a language construct for implementing image enhancement.

9. A portable camera claimed in claim 2 wherein said programming language includes a language construct for implementing image painting algorithms including brush jittering and tiling.

10. A portable camera claimed in claim 2 wherein said programming language includes a language construct for implementing edge detection.

35 11. A portable camera claimed in claim 2 wherein said programming language includes a language construct for implementing image illumination.

12. A portable camera claimed in claim 2 wherein said programming language includes a language construct

for implementing text and fonts.

13. A portable camera claimed in claim 2 wherein said programming language includes a language construct for implementing face detection.

5 14. A portable camera claimed in claim 2 wherein said programming language includes a language construct for implementing the utilisation of arbitrary complexity pre-rendered graphical objects.